

P0312 Antifungal susceptibility of Spanish *Candida auris* isolates determined by Etest and Sensititre YeastOne

Alba Ruiz*¹, Marcelo Fernandez¹, Emilia Canton⁴, Marta Garrido Jareño², Paula Ramirez³, Jose Luis López-Hontangas², Javier Peman Garcia²

¹Medical Research Institute La Fe, Severe Infection Research Group, valencia, Spain, ²Hospital La Fe, Department of Clinical Microbiology, valencia, Spain, ³Hospital La Fe, Department of Critical Care, valencia, Spain, ⁴Medical Research Institute La Fe, Severe Infection Research Group, valencia, Spain

Background: *Candida auris* is an emerging pathogen causing candidaemia outbreaks in several countries. *C. auris* is phylogenetically related to *C. krusei*, *C. lusitanae*, and *C. haemulonii*, which are intrinsic or inducible resistance to fluconazole (FLU) and amphotericin B (AMB), important feature for the establishment of an appropriate treatment.

Materials/methods: Susceptibility of fluconazole (FLU), voriconazole (VRC), posaconazole (PSC) isavuconazole (ISA), anidulafungin (AFG), caspofungin (CFG), micafungin (MFG) and amphotericin-B (AMB) was determinate by SensititreYeastOne® (SYO) and Etest® against 56 *C. auris* blood isolates and compared the results obtained by these two methods. For interpretation of MICs results we used the recommended CDC breakpoints for *Candida* spp.

All isolates were identified by ITS sequencing. High off-scale MIC and low off scale MIC results were left unchanged. For comparison, MICs determinate by the Etest were increased to the next 2-fold dilution concentration matching with the scale used in the SYO. Significant differences between methods were determined by the *t* test.

Results: In Table 1 are displayed MICs results obtained by Etest and SYO.

Table 1. In vitro activity of antifungal agent against 56 *C. auris* blood isolates

Method	MIC parameter	MIC (mg/L) of indicated drug							
		AFG	CFG	MFG	FLU	ISA	PSC	VRC	AMB
E-test	Range	0.008-1	0.064-1	0.008-1	>256	0.032- ₁	0.016-0.5	8-64	0.064- ₂
	MIC ₅₀	0.064	0.25	0.032	>256	0.125	0.25	64	1
	MIC ₉₀	0.125	0.5	0.064	>256	0.25	0.25	64	2
	GM	0.057	0.301	0.032	>256	0.128	0.174	53.16	0.699
SYO	Range	0.06-0.5	0.03-0.5	0.03-0.5	>256	ND	0.015-0.25	0.5->8	0.25-1
	MIC ₅₀	0.125	0.06	0.06	>256	ND	0.06	2	0.5
	MIC ₉₀	0.25	0.125	0.06	>256	ND	0.125	4	0.5
	GM	0.121	0.056	0.057	>256	ND	0.057	1.7	0.38

Conclusions:

1. All *C. auris* isolates, independently of the method used, are fluconazole resistant (MICs >256µg/mL), AMB susceptible (MIC ≤1µg/mL) and echinocandins susceptible (MIC ≤1µg/mL).
2. By Etest all isolates were voriconazole resistant while only 18% by SYO.
3. The most active azole was isavuconazole followed by posaconazole.
4. In spite of AMB MICs by SYO were 4 to 5 times higher than by Etest all isolates were susceptible to AMB.